

Band	Position	Education	Minimum Experience	Technology	Duties	Aptitude Criteria To Qualify For Position	Behavior Criteria To Achieve in Current Job: Required to Advance	Recommended Training for Current Job: Knowledge Required To Advance
		ANY COMBINATION	OF EDUCATION & EXPERIENCE					
5	Network Administrator	BA/BS - Computer Science (CS) or related field	Prefer working knowledge with Windows, VMS or Linux OS; although no experience is required	Knowledge of or experience with computer operating systems (both server and PC), network administration and database structure	Under direct supervision, maintains integrity of the operating system environment; performs system software upgrades including planning and scheduling, testing and coordination.	Strong technical aptitude (test)	Communication Skills (Written and Verbal)	Specific technology and tool training required for the position
					Performs server configuration, installation and setup with guidance.	No active personnel difficulties; positive performance reviews over the past two years	Self motivated	New MDT employee orientation, New User Orientation
		Associates degree in CS	1-2 years of general technical data center operations/systems management experience		Monitors and maintains continuity with system software licensing and maintenance agreements.	Working knowledge of PC's and operating systems	Ability to think logically, be creative and use imagination	Documentation - the who/what/where/when/why approach to the HOW
					Performs data backups and recoveries.		Proven problem solver	General Application Development Standards and Processes
		Non-related Bachelors Degree	1-2 years of general technical data center operations/systems management experience/operations experience		Maintains operations documentation for individual restorability and Disaster Recovery; understands and conducts the tasks associated as duties are assigned		Ability to quickly learn new operating systems or new technology assigned	Security Overview (network, server, database, application, personal computer)
					Develops and provides security reporting necessary for senior technicians to perform their responsibilities.		Reading comprehension	Software/hardware compatibility awareness and testing
		Non-related Associates Degree	3-4 years of general technical data center operations/systems management experience		Completes basic user account administration and monitors file access following identified steps; all unique requests forwarded to senior personnel		Active listening	MDT Microsoft Project Overview & Web Interface
					Maintains shared peripherals (i.e. printers) attached to the network		Ability to identify problems	MS Office Skills (Word, Excel, Outlook)
		No Degree	5 or more years of general technical data center operations/systems management experience		Conducts application compatibility testing under direct supervision		Ability to plan, organize, gather and conduct research	Keyboarding (Typing)
					Provides next level support and mentoring for user support staff.		Quality, accuracy and attention to detail	Listening Skills
					Writes or contributes to instructions or manuals to guide team mates and/or identified users		Ability to take direction	Unit and System Testing
					Provides status reports/regular updates to supervisor and project lead			
					Seeks help when has questions or concerns			
					Actively interacts with other IS Personnel			
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6	Network Administrator	BA/BS - Computer Science (CS) or related field	1-2 years of general technical data center operations/systems management experience; exceptions could be granted on a case by case basis (person meets technology, duties, behaviors, technical requirements, and training requirements but has less than 1 year experience)	Prefer knowledge of technology in use at MDT. Currently <i>Database</i> : Oracle, SQL; <i>OS</i> : VMS, Linux, Windows 2003; <i>Network</i> : principles & processes, Cisco equipment, VPN, Wireless; <i>Security</i> : AD policies, groups, security realms, file security by OS and DB	All band 5 Associate Technical Analyst duties + the following:	All band 5 Associate Technical Analyst aptitude criteria + the following:	All band 5 Associate Technical Analyst behavior criteria + the following:	Requirements Definition (focus on Security rqmts)
				Ability to grasp MDT ISD process requirements and implement documentation standards quickly	Expands server knowledge to include base line knowledge of Web Servers and Application Servers; providing for the maintenance and support of these servers according to detailed documentation. Understands and installs OS Utility Software and completes all server hardware configurations	Experience that clearly demonstrates execution of Band 5 Associate Technical Analyst Duties as defined above.	Works Independently with limited supervision on assigned tasks	Technical training as needed (failure response/recovery - files/servers, etc: specific OS training, tool training - Visio, etc.)
			3-4 years of general technical data center operations/systems management experience	Demonstrated ability to read technical materials and interpret, comprehend and utilize information obtained.	Monitors and tunes the systems to achieve optimum performance levels. System performance and monitoring routine tasks	Consistently meets deadlines	Prioritizes workload and multi-tasks to Supervisor's satisfaction	High level Disaster Recovery background training
				High level understanding of disaster recovery and business resumption planning as compared/contrasted with high availability across client server platforms.	Ensures data/media recoverability by insuring a schedule of system backups and database archive operations. Supports media management through internal methods and procedures.	Demonstrated responsiveness/follow-through activities	Service Oriented	High level Disaster Recovery Network training
		Non-related Bachelors Degree	3-4 years of general technical data center operations/systems management experience	Requires familiarity with domain structures, user authentication and digital signatures	Interfaces with development personnel to understand their security needs and works with more senior staff to identify and implement the changes/processes necessary to accommodate them. Handles routine security access processes.	Able to produce appropriate documentation with little correction and in a timely manner	Proactively seeks ways to grow and expand technical skills	Refresher course on MDT Application Development and SDLC Standards, Program-IT
					Aids in the investigation, planning, documentation, implementation, and maintenance of disaster recovery plans.	Trouble Shooting Skills	Analytical Thinking	PC Software - patch management; software deployment
		Non-related Associates Degree	5-6 years of general technical data center operations/systems management experience		Responsible for assisting higher level staff in the testing and analysis of all elements of the network facilities (including power, communications machinery, software, lines, modems, and terminals); implementing changes with guidance.		Understands all relevant operations documentation to fulfill on-call rotational duty responsibilities.	More detailed understanding of MDT and its business; how each division is a part of that business

					Assists users to diagnose and solve data communication problems.		Deductive Reasoning	Entry level project management
					Aids in the investigation, planning, documentation, implementation, and maintenance of unique MDT computer hardware (i.e. cameras, bridge deck sprayers, etc.)			Basic Leadership/Team Building
		No Degree	7 or more years of general technical data center operations/systems management experience		Installs operations system utilities used by more senior personnel for trouble shooting; assists in those efforts.			Further MS Office Training (Power Point, etc.)
					Works on small project efforts, following direction of supervisor.			Technical Writing
					Develops approved documentation for duties as assigned.			
					Performs routine maintenance of all servers within a single O/S.			
					Interacts effectively with consultants and vendors on support concerns.			
					Prepares and maintains requisitions for ISD procured hardware/software; completes ITPRs and enters requests in the BUY-IT system for approvals.			
					Assists with training activities			
					Diagnoses hardware & software problems, replaces defective components			
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6	Network Analyst	BA/BS - Computer Science (CS) or related field	3-4 years of general technical data center operations/systems management experience	Prefer knowledge of technology in use at MDT. Currently Database: Oracle, SQL; OS: VMS, Linux, Windows 2003; Network: principles & processes, Cisco equipment, VPN, Wireless; Security: AD policies, groups, security realms, file security by OS and DB	All band 6 Associate Technical Analyst duties + the following:	All Band 6 Associate Technical Analyst aptitude criteria + the following:	All band 6 Associate Technical Analyst behavior criteria + the following:	Thorough Project Management Training (techniques and tools) with focus on small projects and estimating
				All Band 6 Associate Technical Analyst Technologies plus the following:	Responsible for all activities related to systems administration. Ensures long-term requirements of systems operations and administration are included in the overall information systems planning of MDT.	Experience that clearly demonstrates execution of Band 6 Associate Technical Analyst Duties as defined above.	Must be able to effectively communicate with senior level staff and management to ensure ideas and concerns are well articulated and addressed.	Database and Systems Performance and Monitoring
		Associates degree in CS	5-6 years of general technical data center operations/systems management experience	Basic understanding of networking topology, MDT configuration, ITSD configuration, security implications, VPN, wireless environment, fibre, coax, CAT5, etc.	Responsible for the installation maintenance, configuration and integrity of computer systems software including load balancing.	Proficient in operations requirements to fulfill on-call rotational duty responsibilities.	Ability to provide limited work direction to others	Other Technical training as needed (i.e. network analysis tools, server software distribution tools, peculiarities with Server O/S, Scripting, etc.)
				Understanding of database technology - from both the developers' view and the systems view, MDT DB configuration (schemas), security implications, etc.	Implements or directs the implementation of operating system enhancements that will improve the reliability and performance of the system.	Ability to develop clear and accurate scoping documentation for small project efforts and/or position papers detailing pros and cons of a given technology	Results Oriented	Introductory Training on Managing Teams
		Non-related Bachelors Degree	5-6 years of general technical data center operations/systems management experience	General understanding of portals; Oracle forms & reports services	Performs more complex testing with 'use case' scenarios including recovery failures	Detail oriented	Decision Maker	Mentoring
				Knowledge of at least 2 scripting tools or development languages (Perl, DCL, SQL, JAVA, HTML, Unix shell, VB)	Leads small (i.e. less than a month) project efforts; Assign duties and roles.	Provides mentoring and guidance to Associate Technical Analysts	Networking (individuals and teams)	User Requirements Training
		Non-related Associates Degree	7-8 years of general technical data center operations/systems management experience	Expanded server knowledge to include detailed knowledge of Web Servers; providing the knowledge and leadership regarding any unique requirements	General Database support including schema migrations (Oracle and SQL); coordinates changes to computer databases, tests and implements the database applying knowledge of database management systems; supports Oracle Tools	Produces solid Unit and System testing documentation	Positive Relationship building	Negotiating
				Understands virtual technology	Utilizes problem solving skills to assist developers in resolving database problems; seeking guidance from senior staff when dramatic changes required. Develops an understanding of OS, DB & Network specific utilities and tools	Possesses a broad level of understanding regarding business divisions and their use of ISD provided technology and applications	Inductive Reasoning (forms relationships amongst seemingly unrelated events)	People Skills (focus on communication)
		No Degree	9 or more years of general technical data center operations/systems management experience		Under general supervision, responsible for the routine testing and analysis of all elements of the network facilities. Monitors and controls the performance and status of the network resources including the LAN, WAN and internet.		Requirements identification (ability to ask the right questions and use observation techniques to draw out requirements from the business user).	How to train users/customers
					Identifies network areas needing upgrade		Negotiation and persuasion	Testing (including use case scenarios)
					Develops and writes procedures for installation, use, trouble shooting of common hardware & software; techniques for approaching unique MDT hardware and software (RWIS, camera equipment, etc.)		Ability to talk in non technical terms to the business user and/or management for them to understand what you are asking of them.	
					Performs routine maintenance on all servers within either of two O/S's (VMS, Linux, Windows) including unique features such as clustering.		Increased role in On-Call support	

					Provides patch testing, impact analysis and recommendations for implementation on the PC platform; Business applications security analysis and recommendations		Critical Thinking	
					File Share security - monitors and makes recommendations, completes documentation			
					Storage Management - assists in implementations, conducts monitoring usage and performance; recommends options & alternatives as appropriate			
					Develops and implements scripted code to enhance operations processes, web apps, etc.			
					Coordinates with DoA in the administration of Exchange E-mail for the department.			
					Prepares specifications for new equipment, obtains quotes, and ensures accuracy and compatibility with existing systems.			
					Delivers training for staff and users as appropriate			
					Develops understanding of MDT applications and their inter-relationship and impact on the infrastructure.			
					Performs Issue resolution and escalation			
					Recommends changes to improve systems and network configs and determines hardware or software requirements related to those changes.			
					Monitors network, database and/or other performance indicators to determine whether adjustment(s) need to be made on either the short term or longer term			
					Interacts appropriately with consultants and vendors regarding new products or potential products.			
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7 level 1	Network Analyst	BA/BS - Computer Science (CS) or related field	5-6 years of general technical data center operations/systems management experience and specific skills in one or more areas; such as: Security, Database, Network Configuration including demonstrated Project Management (PM) skills and acting as project lead (PL) on multiple occasions	Require knowledge of technology in use at MDT. Currently Database: Oracle, SQL; OS: VMS, Linux, Windows 2003; Network: principles & processes, Cisco equipment, VPN, Wireless; Security: AD policies, groups, security realms, file security by OS and DB	All band 6 Technical Analyst duties + the following:	All Band 6 Technical Analyst aptitude criteria + the following:	All band 6 Technical Analyst behavior criteria + the following:	Advanced Training on Managing Teams
				Clear understanding of MDT application and technology needs, minimally at the tactical (versus strategic) level.	Provides guidance, mentoring support for band 5 and 6 technical staff	Experience that clearly demonstrates execution of Band 6 Technical Analyst Duties as defined above.	Delivered critical technology implementation projects on time and with minimal difficulties	More thorough Requirements Analysis
		Associates degree in CS	7-8 years of technical data center operations/systems management experience and specific skills in one or more areas; such as: Security, Database, Network Configuration; PM & PL skills	Detailed knowledge and skills in either Database, Network or Security such as the individual represents the most knowledgeable source of technology information for MDT on that topic.	Performs Analysis/Design (upgrades in current technology and impacts of the options)	Proven technical an/or project lead on small projects	Complex Problem Solving	Presentation Training
				Knowledge of at least 3 scripting tools	Performs complex scoping assignments	Successful resolutions when on-call.	Influence and Persuasion	Quality Assurance
		Non-related Bachelors Degree	7-8 years of technical data center operations/systems management experience and specific skills in one or more areas; such as: Security, Database, Network Configuration; PM & PL skills	Understanding of the basic relationship between the different architectures and their impact on each other - within MDT and the state infrastructure	Leads medium to large projects and critical projects focusing on true business requirements gathering to insure the proposed solution is indeed the best solution; Provides time and resource estimates for project completion	Position papers developed and subsequent meetings (discussions) identified a course of action that was implemented by the division	Provide leadership role in ISD process improvement activities	Business Process Analysis
					Presents designs, including prototypes as applicable to IS staff and management	Broad and DEEP level of understanding regarding business divisions and their use of ISD provided technology and applications; SPECIFIC understanding of at least 1 business division's technology functions	Team Building	Influencing Others
		Non-related Associates Degree	9-10 years of technical data center operations/systems management experience and specific skills in one or more areas; such as: Security, Database, Network Configuration; PM & PL skills		Performs Business Process Analysis & makes recommended improvements within ISD	Understand SAN and other storage technologies, keep abreast of new hardware, software and emerging O/S, network and database technologies for possible MDT use	Clear understanding of ISD and ITSD policies, procedures and business processes	Caliper testing to identify if interested and the aptitude exists to advance in Management or Higher Technical ladder for future growth
					Designs/architects network design and/or database design	Possesses a strong understanding of change control	Ability to estimate change impacts in terms of triple constraints (time, \$\$, resources) & business effect	ITIL training
		No Degree	11 or more years of technical data center operations/systems management experience and specific skills in one or more areas; such as: Security, Database, Network Configuration; PM & PL skills		Conducts complex database performance and tuning - SQL and/or Oracle; Systems upgrades including test plan preparation, directing junior staff as appropriate.		Understands MDT's roles and relationships between our divisions and other agencies	Further Change Management training
					Provides regular updates to upper management on critical or large system activities.		Works closely with applications staff to coordinate systems and applications deployment	

					Aids in the determination of ISD architecture (both apps and ops)			Management related training if choose management path
					Estimates change impacts in terms of time and resources and lost benefit			Advanced Project Management
					Performs routine maintenance on all servers maintaining O/S knowledge (VMS, Linux, Windows) including unique features.			
					Performs Risk Management			
					Provides prioritization recommendations regarding technology, based on business need.			
					Plans, coordinates & implements network and/or security measures to protect data, software & hardware - including wireless and firewall concerns			
					Reviews recommended changes to improve systems and network configs and determines go/no go decision, presents to management			
					Confers with other higher level analysts (outside of MDT) regarding best practices, how to jointly solve problems			
					Provides leadership and accountability for MDT's AD (Active Directory) environment (domain controllers, etc. for authentication) and SAN environment			
					Develops change management procedures for various technical specialties; documents the processes/procedures			
					Designs, implements and leads the testing of department level disaster recovery scenarios			
					Addresses AD security, fault tolerance and policy design			
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7 Level II	Network Analyst	BA/BS - Computer Science (CS) or related field	7-8years of general technical data center operations/systems management experience and specific skills in two or more areas; such as: Security, Database, Network Configuration including extensive Project Management (PM) skills and demonstrated project lead roles (PL) on difficult and/or sensitive projects	Require knowledge of technology in use at MDT. Currently Database: Oracle, SQL; OS: VMS, Linux, Windows 2003; Network: principles & processes, Cisco equipment, VPN, Wireless; Security: AD policies, groups, security realms, file security by OS and DB	All Band 7 Technical Analyst Duties +	All Band 7 Technical Analyst aptitude criteria + the following:	All Band 7 Technical Analyst behavioral criteria + the following	Leadership Training
				Clear understanding of MDT application and technology needs, at both the strategic and tactical levels.	Provides mentoring to all within ISD on areas of expertise; shares knowledge gained at technology conferences			Managing contracts/writing RFP's etc.
		Associates degree in CS	9-10 years of general technical data center operations/systems management experience and specific skills in two or more areas; such as: Security, Database, Network Configuration including extensive PM & PL skills (see above)	Detailed knowledge and skills in two of three critical areas: Database, Network, or Security such as the individual represents the most knowledgeable source of technology information for MDT on those topics.	Provides impact analysis for all technology projects impacting more than one division	Proven Project Management Experience for large, critical, and/or complex projects	Works with all ISD Applications teams	Attends technology conferences for new directions as well as additional ideas for current technology, learns new technology and establishes training needs for MDT ISD Systems/Operations Team.
				Technology contact person for the Agency when detail is needed.	Performs R&D (Research and Development activities) on both technology and tools, completing impact analysis /cost benefit analysis as it relates to meeting strategic initiatives	Proven Business Analysis Experience	Successful resolution of performance problems	Disaster recovery and COOP training
		Non-related Bachelors Degree	9-10 years of general technical data center operations/systems management experience and specific skills in two or more areas; such as: Security, Database, Network Configuration including extensive PM & PL skills (see above)	Has big picture understanding of development, deployment and analysis processes, procedures and activities	Establishes technology standards for MDT including documentation standards within the Systems and Operations team; Plays a critical role in all related ISD Policy and Procedure development	Proven Team Lead on large and or critical technology implementation efforts	Initiative	Strategic Planning
					Fully comprehends MDT business and processes as it relates to systems and infrastructure; determine technology prioritization in conjunction with management	Able to provide traceability matrices for all system changes (upgrades, new installations etc.); including the ability to successfully identify business, functional and technical specifications .	Change Agent	IEEE training
		Non-related Associates Degree	11-12 years of general technical data center operations/systems management experience and specific skills in two or more areas; such as: Security, Database, Network Configuration including extensive PM & PL skills (see above)		Provides technical leadership in two of three areas: Network/Security and/or Database; completing the more difficult technical tasks in these arenas	Provides liaison services between sys/ops staff and the business community when required.	Judgment/Decisiveness	
					Identifies all needed documentation for the execution of the section's duties and working through management ensures that it is kept current.		Mentoring Abilities and Experience	

		No Degree	13 or more years of technical data center operations/systems management experience and specific skills in two or more areas; such as: Security, Database, Network Configuration; PM & PL skills		Identifies needed technical training for the team; provides OJT as appropriate and works with management to suggest other opportunities		Strategic Thinking and Planning	
					Effectively acts as Data Center Manager; plotting out any relocation, addition of equipment, etc.		Contract Management	
					Owns the physical piece of Disaster Recovery and all necessary documentation' performs the testing.			
					Is an involved member in cross-Agency technical committees; interacts with the public and the federal government representatives as appropriate.			
					Critical member of the ISD Strategic Direction committee -- helps define vision; identifies timelines, goals that would ensure the implementation of all approved technology initiatives			
					Completes impact analysis responses for management regarding technology changes proposed by ITSD or the legislature as well as by our own organization			
					Provides Program Management support of related projects led by others.			
					Act as vendor liaison as appropriate handling contract front end activities			